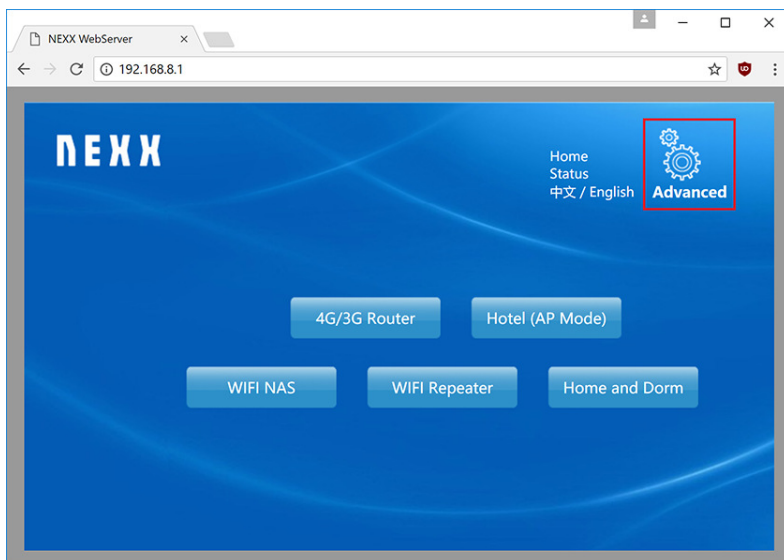
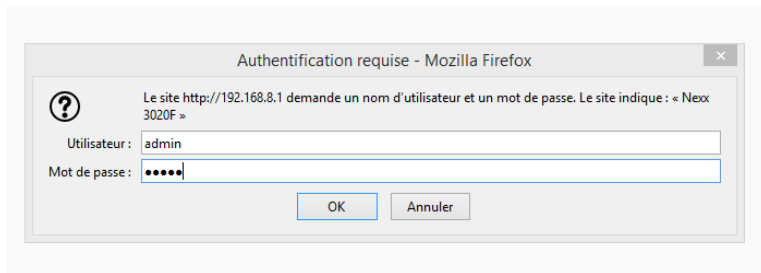


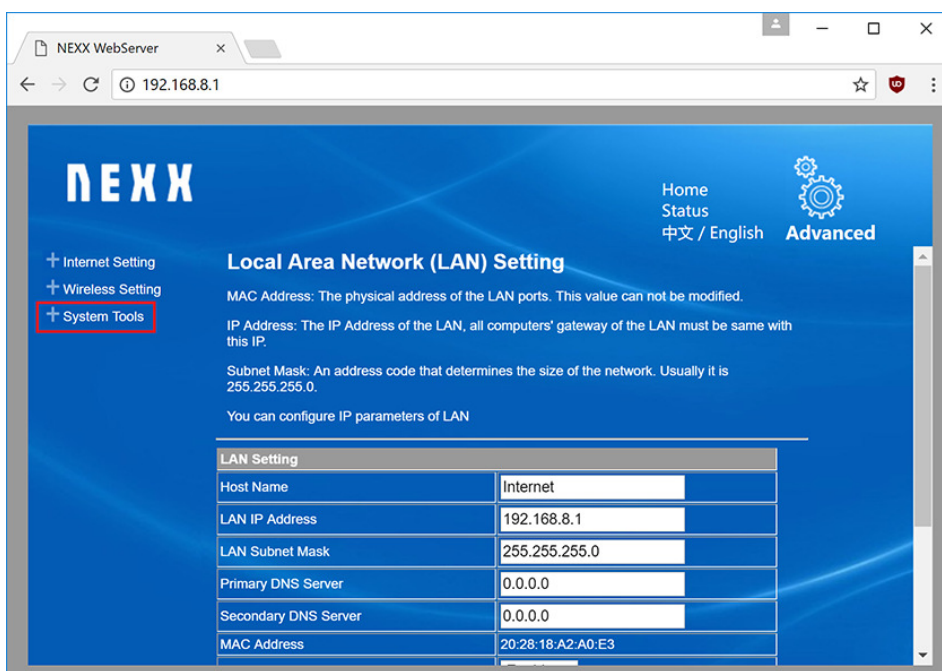
NEXX WT3020 rooted with OpenWrt on Luci Interface

1-FLASHING THE NEXX ROUTER WITH OPENWRT:

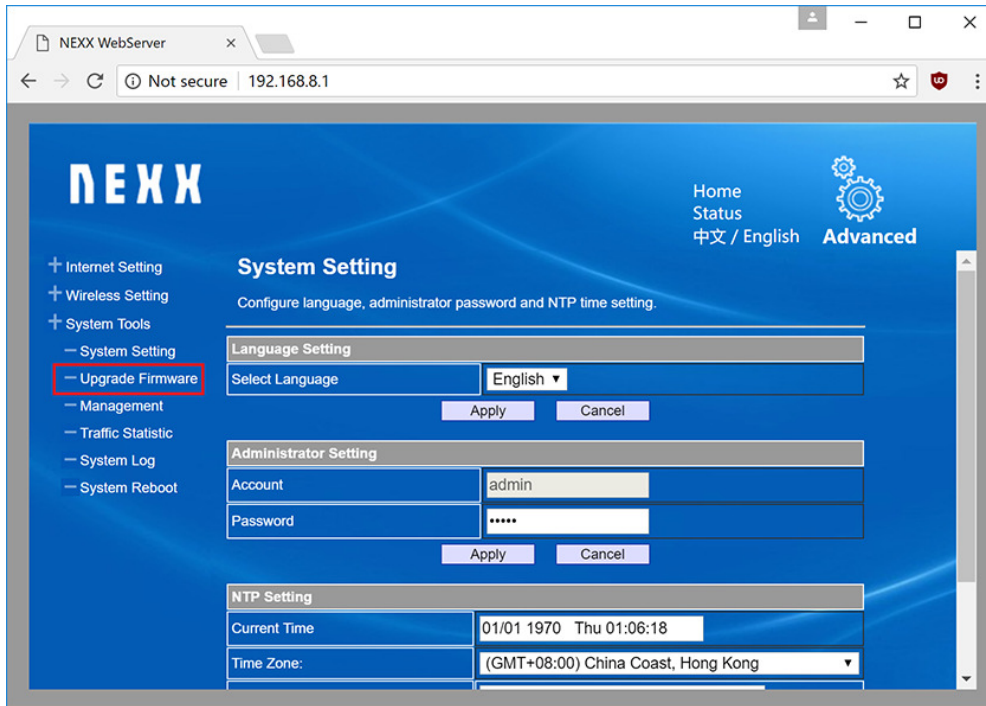
The default address is 192.168.8.1: admin, admin



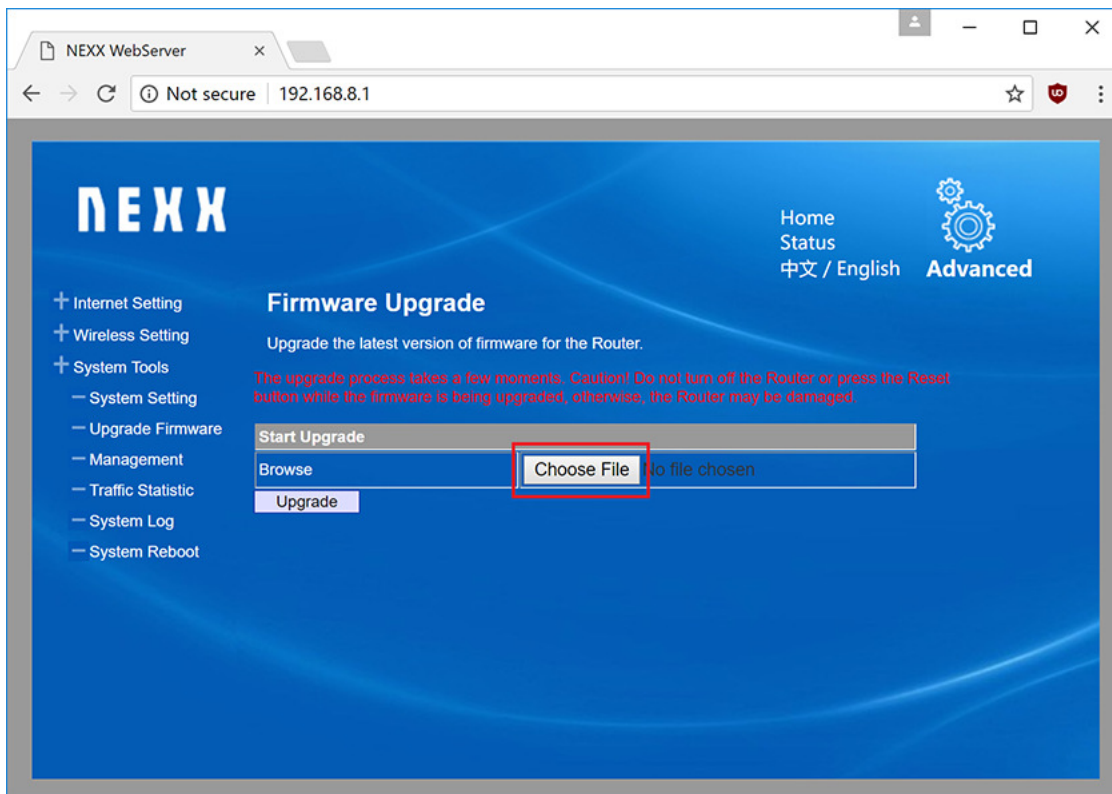
System Tools:




Upgrade firmware:

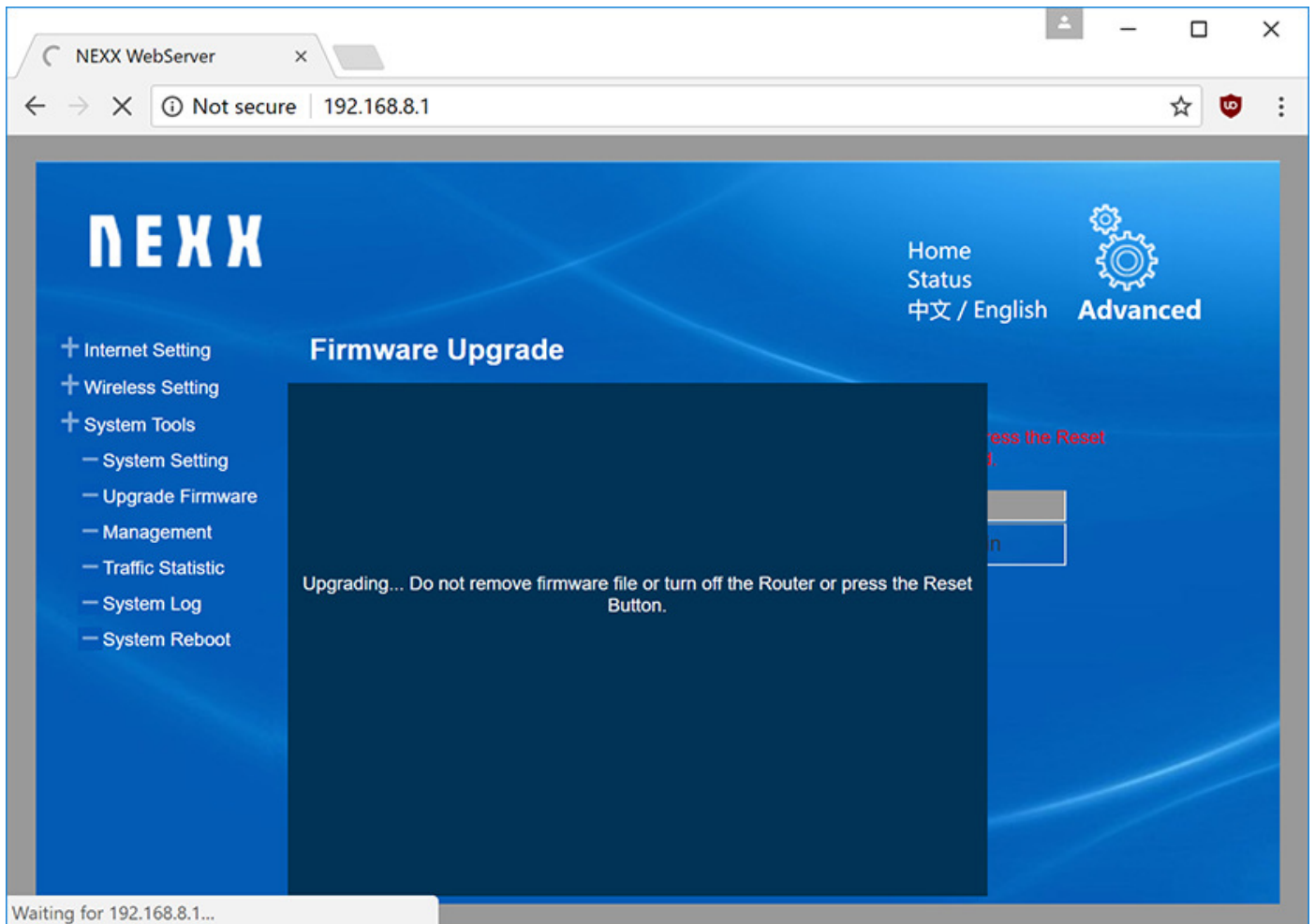


Choose File



I used a bin file:

 [openwrt-15.05-ramips-mt7620-wt3020-8M-squashfs-factory.bin](#)



Flashing the firmware will take a minute or two. Watch your Wi-Fi connection status on your computer or laptop, after a minute or two you will notice that it has lost Wi-Fi connection. If the LED on the Nexx is blinking, wait until it stops blinking, then give it another 30 seconds to be sure. Then remove the power plug and put it back in. Another minute later, there should be a Wi-Fi network called **DSLRCController**. You can close the browser window now.

Default settings

By default, the custom firmware is configured with these settings:

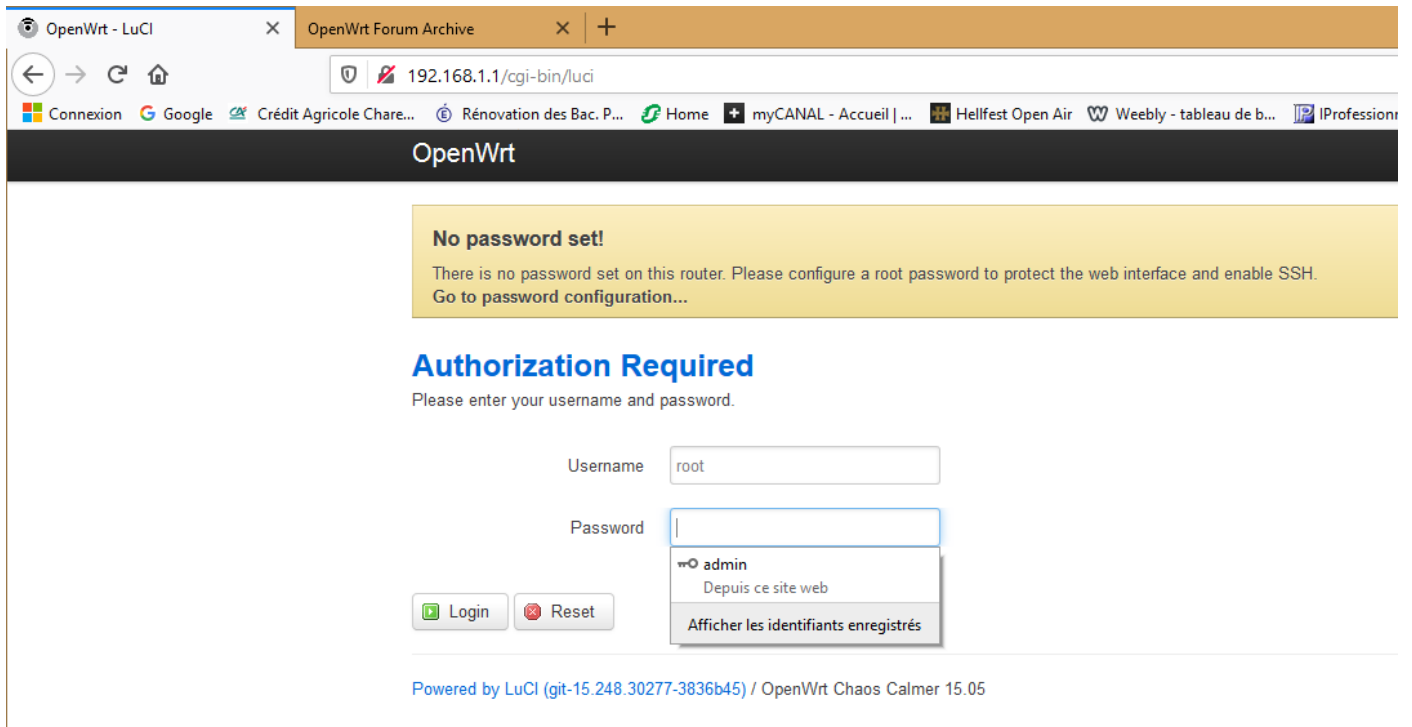
- **Management interface address:** <http://192.168.1.1/>
- **Management interface username:** root
- **Management interface password:** admin

Your **WT3020** is now ready for use, but you can customize the above settings first if you wish.

2- SETTINGS IN ORDER TO HAVE A ROUTER WITH 2 LAN INSTEAD OF 1 WAN+1

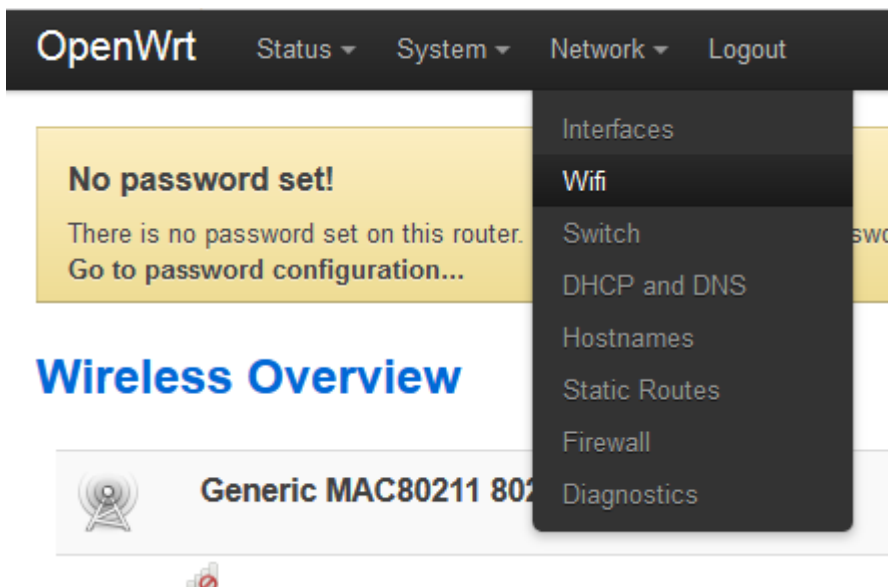
LAN:

Link the PC to the NEXX WT3020 on the LAN port (not the wan):




Password: admin.


Then activate wifi :



No password set!
There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Wireless Overview

 **Generic MAC80211 802.11bgn (radio0)**

 0% Collecting data...

Associated Stations

SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
Collecting data...						

Click enable or create a new wireless wan on add:


No password set!
There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Wireless Network: Master "OpenWrt" (radio0.network2)

The *Device Configuration* section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the *Interface Configuration*.

Device Configuration

General Setup **Advanced Settings**

Status  **SSID: OpenWrt | Mode: Master**
0% *Wireless is disabled or not associated*

Wireless network is disabled

Operating frequency: Mode: N Channel: 11 (2462 MHz) Width: 20 MHz

Transmit Power: 20 dBm (100 mW)

Interface Configuration

General Setup

Wireless Security

MAC-Filter

ESSID

Mode

Network lan:

wan:

wan6:

create:

Choose the network(s) you want to attach to this wireless interface or fill out the *create* field to define a new network.

Hide ESSID

WMM Mode

[Back to Overview](#)

Save & Apply

Save

Reset

Applying changes



Waiting for changes to be applied...

Save and apply.

Activate the network on Enable after a while it appears Disable:

The screenshot shows a web browser window with the OpenWrt LuCI interface. The address bar shows the URL: 192.168.1.1/cgi-bin/luci/stok=93ddd8b283bdb0a7784d21ce21d6b5fc/admin/network/wireless. The page title is "OpenWrt - Wifi - LuCI". The interface displays a yellow warning box: "No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration...". Below this, the "Wireless Overview" section shows a radio interface: "Generic MAC80211 802.11bgn (radio0)". The status is "SSID: OpenWrt | Mode: Master" and "0% Wireless is disabled or not associated". There are buttons for "Scan", "Add", "Disable", "Edit", and "Remove". The "Associated Stations" section is empty, showing "No information available". The footer of the page reads: "Powered by LuCI (git-15.248.30277-3836b45) / OpenWrt Chaos Calmer 15.05".

The wifi appears in the list:

The screenshot shows the OpenWrt LuCI web interface. The main content area displays a yellow warning box: "No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration...". Below this is the "Wireless Overview" section for "Generic MAC80211 802.11bgn (radio0)", showing channel 11 (2.462 GHz) and bitrate of 72.2 Mbit/s. The "Associated Stations" table is currently empty with the message "No information available". On the right, a dark sidebar menu is open, showing "Réseaux" (Networks) and "Wi-Fi" sections. Under "Réseaux", "Mode Avion" is "Désactivée" (Deactivated). Under "Wi-Fi", "Activé" (Activated) is checked, and several wireless networks are listed, including "OpenWrt", "SFR_AEE0", "SFR WiFi FON", and "SFR WiFi Mobile".

Disconnect the ethernet link and Connect to OpenWrt.

It's connected:

Wireless Overview

This detailed view of the wireless interface shows "Generic MAC80211 802.11bgn (radio0)" with channel 11 (2.462 GHz) and a bitrate of 72.2 Mbit/s. The signal strength is now 62%. The SSID is "OpenWrt" in Master mode. The BSSID is "20:28:18:A2:5C:1A" and encryption is None. Action buttons for "Disable", "Edit", and "Remove" are visible.

Associated Stations

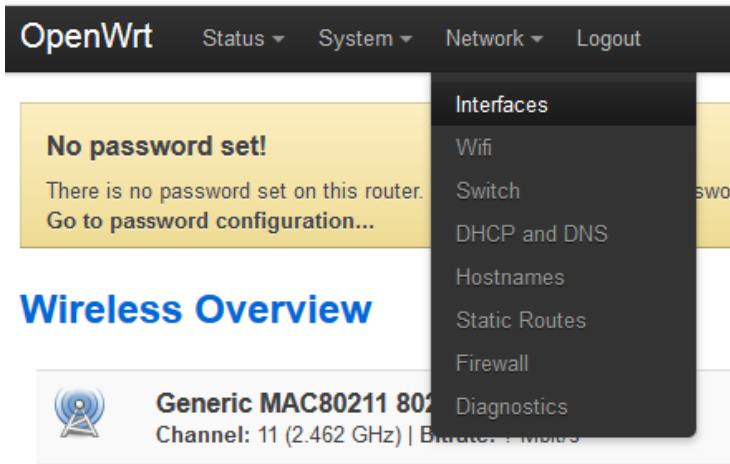
SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
OpenWrt	24:FD:52:B9:CB:52	?	-66 dBm	0 dBm	72.2 Mbit/s, MCS 7, 20MHz	72.2 Mbit/s, MCS 7, 20MHz

Ping ok on the LAN but not ok on the WAN:

The screenshot shows a terminal window on the left and a LuCI network status table on the right. The terminal shows successful ping results for the LAN interface (192.168.1.199) and failed ping results for the WAN interface (192.168.1.199). The LuCI table shows the status of three network interfaces: LAN (br-lan), WAN (eth0.2), and WAN6 (eth0.2).

Network	Status	Actions
LAN br-lan	Uptime: 0h 10m 56s MAC-Address: 20:28:18:A2:5C:1A RX: 273.59 KB (3026 Pkts.) TX: 560.51 KB (2687 Pkts.) IPv4: 192.168.1.1/24 IPv6: FDBE:8438:A23C::1/60	Connect Stop Edit Delete
WAN eth0.2	Uptime: 0h 0m 0s MAC-Address: 20:28:18:A2:5C:1B RX: 0.00 B (0 Pkts.) TX: 68.73 KB (225 Pkts.)	Connect Stop Edit Delete
WAN6 eth0.2	Uptime: 0h 0m 0s MAC-Address: 20:28:18:A2:5C:1B RX: 0.00 B (0 Pkts.) TX: 68.73 KB (225 Pkts.)	Connect Stop Edit Delete

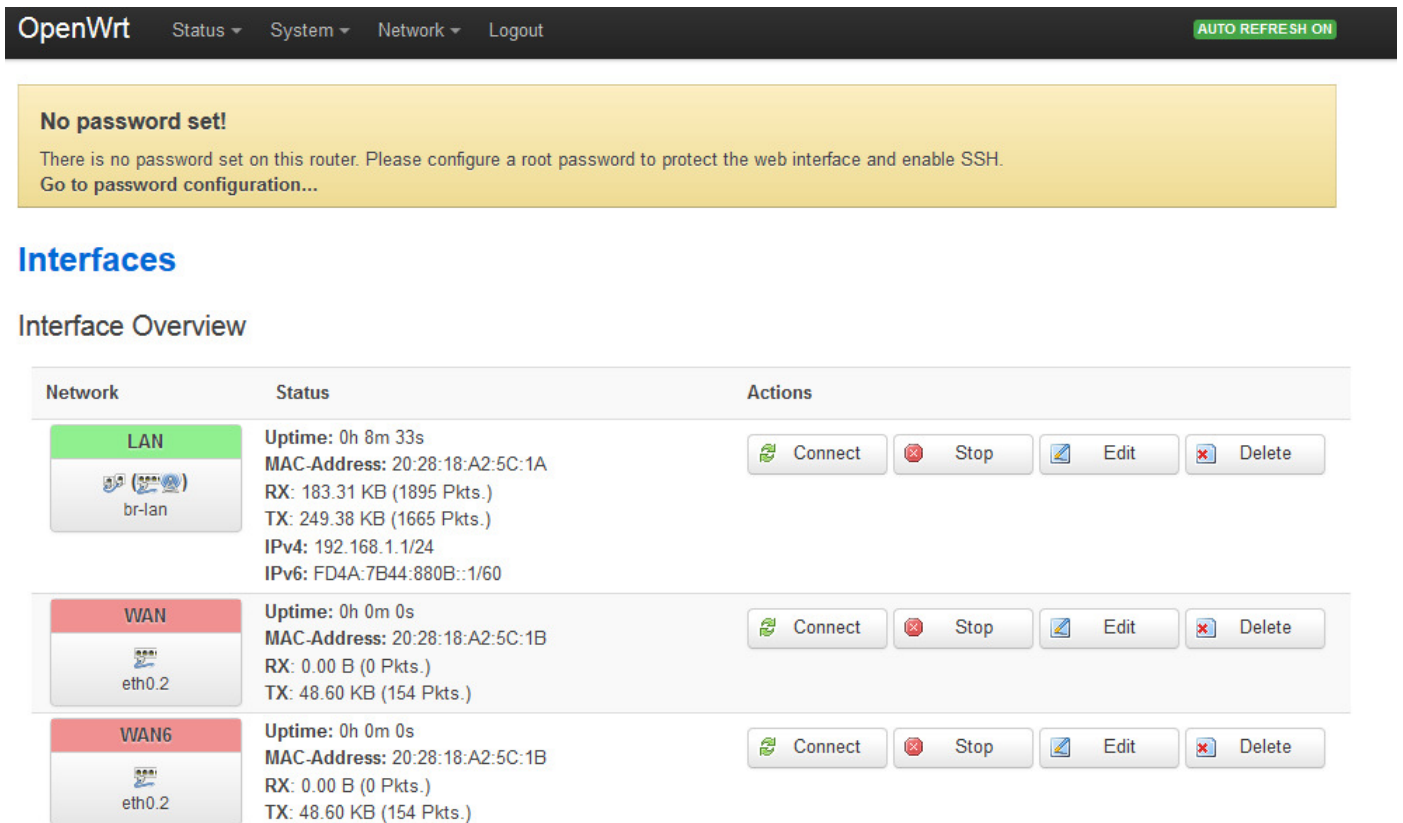
WAN and LAN settings:



The screenshot shows the OpenWrt web interface. At the top, there is a navigation bar with 'OpenWrt', 'Status', 'System', 'Network', and 'Logout'. A dropdown menu is open under 'Network', listing 'Interfaces', 'Wifi', 'Switch', 'DHCP and DNS', 'Hostnames', 'Static Routes', 'Firewall', and 'Diagnostics'. On the left, a yellow warning box says 'No password set!'. Below it, a blue heading reads 'Wireless Overview'. At the bottom, a status bar shows 'Generic MAC80211 802.11n Channel: 11 (2.462 GHz) | Bridge: br-lan'.

Edit the WAN.

Delete WAN IPV6:



The screenshot shows the OpenWrt web interface with the 'Interfaces' page selected. The navigation bar includes 'OpenWrt', 'Status', 'System', 'Network', 'Logout', and an 'AUTO REFRESH ON' button. A yellow warning box at the top states 'No password set!'. The main heading is 'Interfaces' and the sub-heading is 'Interface Overview'. Below this is a table with three columns: 'Network', 'Status', and 'Actions'.

Network	Status	Actions
LAN br-lan	Uptime: 0h 8m 33s MAC-Address: 20:28:18:A2:5C:1A RX: 183.31 KB (1895 Pkts.) TX: 249.38 KB (1665 Pkts.) IPv4: 192.168.1.1/24 IPv6: FD4A:7B44:880B::1/60	Connect Stop Edit Delete
WAN eth0.2	Uptime: 0h 0m 0s MAC-Address: 20:28:18:A2:5C:1B RX: 0.00 B (0 Pkts.) TX: 48.60 KB (154 Pkts.)	Connect Stop Edit Delete
WAN6 eth0.2	Uptime: 0h 0m 0s MAC-Address: 20:28:18:A2:5C:1B RX: 0.00 B (0 Pkts.) TX: 48.60 KB (154 Pkts.)	Connect Stop Edit Delete

OpenWrt Status System Network Logout AUTO REFRESH ON

Interface Overview

Network	Status	Actions
LAN br-lan	Uptime: 0h 9m 38s MAC-Address: 20:28:18:A2:5C:1A RX: 206.76 KB (2261 Pkts.) TX: 280.38 KB IPv4: 192.168.1.1 IPv6: FD4A:7...	Connect Stop Edit Delete
WAN eth0.2	Uptime: 0h 0m 0s MAC-Address: ... RX: 0.00 B (0 Pkts.) TX: 48.60 KB	Edit Delete
WAN6 eth0.2	Uptime: 0h 0m 0s MAC-Address: 20:28:18:A2:5C:1B RX: 0.00 B (0 Pkts.) TX: 48.60 KB (154 Pkts.)	Connect Stop Edit Delete

[Add new interface...](#)

Global network options

IPv6 ULA-Prefix

Really delete this interface? The deletion cannot be undone!
 You might lose access to this device if you are connected via this interface.

OK Annuler

OK

Edit the WAN

OpenWrt Status System Network Logout AUTO REFRESH ON

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Interfaces

Interface Overview

Network	Status	Actions
LAN ?	Collecting data...	Connect Stop Edit Delete
WAN ?	Collecting data...	Connect Stop Edit Delete

[Add new interface...](#)

Global network options

IPv6 ULA-Prefix

No change here:

No password set!


There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
Go to password configuration...

Interfaces - WAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Common Configuration

- General Setup
- Advanced Settings
- Physical Settings
- Firewall Settings

Status  ? Collecting data...

Protocol

Hostname to send when requesting DHCP

 Back to Overview

Save & Apply

Save

Reset

Powered by LuCI (git-15.248.30277-3836b45) / OpenWrt Chaos Calmer 15.05

No change here:

Interfaces - WAN


On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Common Configuration


- General Setup
- Advanced Settings
- Physical Settings
- Firewall Settings

Bring up on boot

Use builtin IPv6-management

Use broadcast flag  Required for certain ISPs, e.g. Charter with DOCSIS 3

Use default gateway  If unchecked, no default route is configured

Use DNS servers advertised by peer  If unchecked, the advertised DNS server addresses are ignored

Use gateway metric

Client ID to send when requesting DHCP

Vendor Class to send when requesting DHCP

Override MAC address

Override MTU

Only attached to wireless network and no bridge:

OpenWrt Status System Network Logout AUTO REFRESH ON

No password set!
There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Interfaces - WAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

Bridge interfaces creates a bridge over specified interface(s)

Interface Ethernet Switch: "eth0"
 VLAN Interface: "eth0.1" (lan)
 VLAN Interface: "eth0.2" (wan)
 Wireless Network: Master "OpenWrt" (lan)
 Custom Interface:

Firewal-zone on LAN

OpenWrt Status System Network Logout AUTO REFRESH ON

No password set!
There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Interfaces - WAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Common Configuration


General Setup **Advanced Settings** Physical Settings **Firewall Settings**

Create / Assign firewall-zone lan: lan: wan: wan: unspecified -or- create:

Choose the firewall zone you want to assign to this interface. Select *unspecified* to remove the interface from the associated zone or fill out the *create* field to define a new zone and attach the interface to it.

Save and apply.

Applying changes

 Waiting for changes to be applied...

Wait:



OpenWrt Status ▾ System ▾ Network ▾ Logout AUTO REFRESH ON

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
Go to password configuration...

Interfaces

Interface Overview

Network	Status	Actions
LAN  ?	Collecting data...	Connect Stop Edit Delete
WAN  ?	Collecting data...	Connect Stop Edit Delete

Add new interface...

Global network options

IPv6 ULA-Prefix

Save & Apply Save Reset

Edit the LAN:



OpenWrt Status ▾ System ▾ Network ▾ Logout AUTO REFRESH ON

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
Go to password configuration...

Interfaces

Interface Overview

Network	Status	Actions
LAN  br-lan	<p>Uptime: 0h 17m 5s</p> <p>MAC-Address: 20:28:18:A2:5C:1A</p> <p>RX: 414.19 KB (4669 Pkts.)</p> <p>TX: 752.41 KB (4178 Pkts.)</p> <p>IPv4: 192.168.1.1/24</p> <p>IPv6: FD4A:7B44:880B::1/60</p>	Connect Stop Edit Delete
WAN  Master "OpenWrt"	<p>Uptime: 0h 0m 0s</p> <p>MAC-Address: 20:28:18:A2:5C:1B</p> <p>RX: 67.92 KB (722 Pkts.)</p> <p>TX: 222.19 KB (796 Pkts.)</p>	Connect Stop Edit Delete

Add new interface...

Global network options

IPv6 ULA-Prefix

Save & Apply Save Reset

No change:

OpenWrt Status System Network Logout AUTO REFRESH ON


There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Interfaces - LAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

Status	 br-lan	Uptime: 0h 18m 13s MAC-Address: 20:28:18:A2:5C:1A RX: 441.36 KB (5018 Pkts.) TX: 839.43 KB (4526 Pkts.) IPv4: 192.168.1.1/24 IPv6: FD4A:7B44:880B::1/60
--------	--	--

Protocol:

IPv4 address:

IPv4 netmask:

IPv4 gateway:

IPv4 broadcast:

Use custom DNS servers:

No change:

OpenWrt Status System Network Logout AUTO REFRESH ON

No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Interfaces - LAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

Bring up on boot

Use builtin IPv6-management

Override MAC address:

Override MTU:

Use gateway metric:

DHCP Server

General Setup **Advanced Settings** IPv6 Settings

Link interface with Ethernet switch VLAN and Wireless network:








No password set!
There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Interfaces - LAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

- Bridge interfaces  creates a bridge over specified interface(s)
- Enable STP  Enables the Spanning Tree Protocol on this bridge
- Interface  Ethernet Switch: "eth0"
  VLAN Interface: "eth0.1" (**lan**)
  VLAN Interface: "eth0.2"
  Wireless Network: Master "OpenWrt" (**lan, wan**)
  Custom Interface:

DHCP Server

General Setup **Advanced Settings** IPv6 Settings

No change:

No password set!
There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)


Interfaces - LAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Common Configuration

General Setup **Advanced Settings** Physical Settings Firewall Settings

- Create / Assign firewall-zone **lan:**
 wan: (empty)
 unspecified -or- create:

 Choose the firewall zone you want to assign to this interface. Select *unspecified* to remove the interface from the associated zone or fill out the *create* field to define a new zone and attach the interface to it.

DHCP Server

General Setup **Advanced Settings** IPv6 Settings

Save and apply:

OpenWrt Status System Network Logout AUTO REFRESH ON

unspecified -or- create:

i Choose the firewall zone you want to assign to this interface. Select *unspecified* to remove the interface from the associated zone or fill out the *create* field to define a new zone and attach the interface to it.

DHCP Server

General Setup **Advanced Settings** IPv6 Settings

Ignore interface **i** Disable DHCP for this interface.

Start
i Lowest leased address as offset from the network address.

Limit
i Maximum number of leased addresses.

Leasetime
i Expiry time of leased addresses, minimum is 2 minutes (2m).

Wait:

OpenWrt Status System Network Logout AUTO REFRESH ON


No password set!

There is no password set on this router. Please configure a root password to protect the web interface and enable SSH.
[Go to password configuration...](#)

Interfaces - LAN

On this page you can configure the network interfaces. You can bridge several interfaces by ticking the "bridge interfaces" field and enter the names of several network interfaces separated by spaces. You can also use VLAN notation `INTERFACE.VLANNR` (e.g.: `eth0.1`).

Applying changes

 Waiting for changes to be applied...

Common Configuration

General Setup **Advanced Settings** Physical Settings **Firewall Settings**

Create / Assign firewall-zone

lan:

wan: (empty)

unspecified -or- create:

i Choose the firewall zone you want to assign to this interface. Select *unspecified* to remove the interface from the associated zone or fill out the *create* field to define a new zone and attach the interface to it.

Link a device on the WAN: it pinging!!!

The screenshot shows the OpenWrt network status page. A terminal window in the foreground displays the following ping results for the WAN interface:

```
Envoi d'une requête 'Ping' 192.168.1.199 avec 32 octets de données :
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128

Statistiques Ping pour 192.168.1.199:
  Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
  Durée approximative des boucles en millisecondes :
    Minimum = 0ms, Maximum = 0ms, Moyenne = 0ms

D:\_MES DOCUMENTS>ping 192.168.1.199

Envoi d'une requête 'Ping' 192.168.1.199 avec 32 octets de données :
Réponse de 192.168.1.199 : octets=32 temps<1 ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128

Statistiques Ping pour 192.168.1.199:
  Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
  Durée approximative des boucles en millisecondes :
    Minimum = 0ms, Maximum = 1ms, Moyenne = 0ms

D:\_MES DOCUMENTS>
```

The network status page shows two interfaces:

- LAN** (br-lan): Uptime: 0h 24m 29s, MAC-Address: 20:28:18:A2:5C:1A, RX: 561.67 KB (6393 Pkts.), TX: 1.08 MB (5837 Pkts.), IPv4: 192.168.1.1/24, IPv6: FD4A:7B44:880B::1/60.
- WAN** (Master "OpenWrt"): Uptime: 0h 0m 0s, MAC-Address: 20:28:18:A2:5C:1B, RX: 63.99 KB (773 Pkts.), TX: 142.84 KB (827 Pkts.).

Link a device on the LAN: It's pinging too!!!

The screenshot shows the OpenWrt network status page. A terminal window in the foreground displays the following ping results for the LAN interface:

```
Envoi d'une requête 'Ping' 192.168.1.199 avec 32 octets de données :
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128

Statistiques Ping pour 192.168.1.199:
  Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
  Durée approximative des boucles en millisecondes :
    Minimum = 0ms, Maximum = 1ms, Moyenne = 0ms

D:\_MES DOCUMENTS>ping 192.168.1.199

Envoi d'une requête 'Ping' 192.168.1.199 avec 32 octets de données :
Réponse de 192.168.1.199 : octets=32 temps<1 ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128
Réponse de 192.168.1.199 : octets=32 temps<1ms TTL=128

Statistiques Ping pour 192.168.1.199:
  Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
  Durée approximative des boucles en millisecondes :
    Minimum = 0ms, Maximum = 1ms, Moyenne = 0ms

D:\_MES DOCUMENTS>
```

The network status page shows two interfaces:

- LAN** (br-lan): Uptime: 0h 25m 44s, MAC-Address: 20:28:18:A2:5C:1A, RX: 574.56 KB (6513 Pkts.), TX: 1.11 MB (5952 Pkts.), IPv4: 192.168.1.1/24, IPv6: FD4A:7B44:880B::1/60.
- WAN** (Master "OpenWrt"): Uptime: 0h 0m 0s, MAC-Address: 20:28:18:A2:5C:1B, RX: 79.29 KB (902 Pkts.), TX: 185.07 KB (986 Pkts.).